

**Listing of Claims:**

1. (Currently Amended) A system for attachment of an information sensor opposite to, and at an air gap's distance from, a coder of a bearing, said system including:

a cap intended to be associated with a ring of said bearing and at least partly covering the coder, wherein the cap includes

at least one device for attachment of the sensor to an internal surface of said cap, said attachment device being integral with the internal surface, and

a device for electrical connection of said sensor with a unit designed to process the information detected, with said connection device including an internal means of connection constructed to interact with complementary means of connection provided on the sensor, and said connection device further including an external means of connection connected to said internal means and constructed to permit reading of the information detected,

wherein said cap comprises consists of a single integrated piece.

2. (Previously Presented) A system according to Claim 1, wherein the cap is formed from an annular piece including a radial disk and an axial cylindrical skirt that is extended by an axial cylindrical projecting ledge for fitting said system onto the bearing ring.

3. (Previously Presented) A system according to Claim 2, wherein the disk includes a central bore.

4. (Previously Presented) A system according to Claim 2, wherein the attachment device is provided on an internal surface of the disk or on an internal surface of the skirt.

5. (Previously Presented) A system according to Claim 2, wherein two attachment devices are provided, respectively, on an internal surface of the disk and on an internal surface of the skirt, the connection device being constructed to permit connection of the sensor placed in one or the other of the attachment devices.

6. (Previously Presented) A system according to Claim 1, wherein the attachment device includes a housing in which the sensor is to be attached, said housing including a means for attachment of said sensor.
7. (Previously Presented) A system according to Claim 6, wherein each of the projections includes an elastic spline constructed to permit clipping of the sensor within the housing.
8. (Previously Presented) A system according to Claim 6, wherein the means for attachment include two runners designed to cooperate with complementary forms provided on the sensor.
9. (Previously Presented) A system according to Claim 8, wherein each runner includes an elastic spline provided with a projection near an end thereof, with said splines being designed to permit clipping of the sensor after it is positioned in the housing.
10. (Previously Presented) A system according to Claim 1, wherein the internal means of connection include two connectors in a U-shape, each of the connectors constructed to receive and connect a respective connection lug provided on the sensor.
11. (Previously Presented) A system according to Claim 1, wherein the internal means of connection include two contactors respectively mounted in a relay in a housing provided on the internal surface of the cap between a resting position in which the contactors seal the housing and a connection position, the passage from one position to the other being accomplished under the action of attachment of the sensor.
12. (Previously Presented) A system according to Claim 1, wherein the external means of connection include a connector on an external face of the cap.
13. (Previously Presented) A system according to Claim 1, wherein the external means of connection include a molded wire in the cap, an end of said wire opposite the internal means of connection being provided with a connector.
14. (Previously Presented) A sensor designed to be attached to the cap of an attachment system according to Claim 1, wherein the sensor includes a complementary means of electrical connection designed to cooperate with the internal means of electrical connection of

the cap after the sensor is attached to the cap, and to establish the connection between said sensor and the unit by means of the external means of connection.

15. (Previously Presented) A sensor according to Claim 14, wherein the sensor includes a body of plastic material in which means of detection are molded with the complementary means of connection projecting from said body.

16. (Previously Presented) A sensor according to Claim 14, wherein the sensor includes a body that is parallelepiped in shape.

17. (Previously Presented) A sensor according to Claim 14, wherein the complementary means of connection are formed from two lugs designed to engage the internal means of connection after the sensor is attached to the cap.

18. (Previously Presented) A sensor according to Claim 14, wherein the complementary means of connection are formed from two plates designed to rest on the internal means of connection when the sensor is attached to the cap.

19. (Previously Presented) A sensor according to Claim 18, wherein the plates are molded in the body with each plate having a free surface.

20. (Previously Presented) A sensor according to Claim 15, wherein an O ring is placed around the body.

21. (Previously Presented) An ensemble including an attachment system according to Claim 1, and a sensor attached and connected to the cap of said system.

22. (Previously Presented) An ensemble according to Claim 21, wherein the sensor is associated with the cap to allow radial reading of the information detected.

23. (Previously Presented) An ensemble according to Claim 21, wherein the sensor is associated with the cap to allow a facial reading of the information detected.

24. (Canceled)

25. (Previously Presented) An ensemble according to Claim 21, wherein the bearing is of the type that includes a fixed ring, a turning ring, and rolling elements placed between said rings, wherein an impulse generating coder is associated with the turning ring, and wherein the cap of said ensemble is associated with the fixed ring.